This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) ~~A self-contained~~ An electronic estrus detection device for determining optimum breeding time in an animal, said electronic estrus detection device ~~calculation and indication~~ comprising:

a housing for releasable placement on an animal; and

~~an~~ a self-contained electronic means operatively associated with said housing for indicating optimum breeding time in the animal, wherein said self-contained electronic means detects and processes ~~detecting and processing~~ information ~~relating~~ related to number, duration, and frequency of mounts on said animal, and wherein said electronic means compares detected and processed information on the animal to a predetermined pre-set threshold for number, duration, and frequency of mounts that indicates ~~calculating and indicating~~ optimum breeding time, wherein only when the detected and processed information for said animal exceeds the pre-set threshold will an indication of optimum breeding time be expressed by the electronic means. ~~to breed based on said information.~~

2. (Currently amended) The estrus detection device as defined in claim 1, wherein said electronic means further processes information to determine if said duration of said mounts meets a preset threshold of time and if a preset number of said mounts occur within a predetermined period of time.

3. (Previously presented) The estrus detection device as defined in claim 1, wherein said electronic means includes a microprocessor.

4. (Previously presented) The estrus detection device as defined in claim 1, wherein said electronic means includes at least one battery.

5. (Previously presented) The estrus detection device as defined in claim 1, wherein said electronic means includes a pressure sensitive switch.

6. (Previously presented) The estrus detection device as defined in claim 1, wherein said electronic means further calculates and indicates suspect estrus and confirmed estrus.

7. (Currently amended) The estrus detection device as defined in claim 1, wherein said electronic means includes a visible display means that indicates optimum breeding time.

8. (Previously presented) The estrus detection device as defined in claim 7, wherein said visible display means is at least one LED.

9. (Currently amended) The estrus detection device as defined in claim 7, wherein said ~~housing is hermetically sealed.~~ electronic means includes a visible display means that indicates mount count and hours elapsed since a first mount of sufficient amount of time to exceed a pre-set threshold of time.

10. (Previously presented) The estrus detection device as defined in claim 1, further comprising a reset means for resetting said electronic means.

11. (Currently amended) ~~A self-contained electronic~~ The estrus detection device as defined in claim 1, wherein the pre-set threshold for number and frequency of mounts is three mounts that occur within a four hour time period. ~~comprising:~~

a housing for releasable placement on an animal; and

an indicating means for indicating suspect estrus, confirmed estrus and optimum time to breed.

12. (Currently amended) The estrus detection device as defined in claim ~~6~~ 11 wherein the pre-set threshold for number, duration, and frequency of mounts is three mounts that last at least three seconds each that occur within a four hour time period ~~said suspect estrus is determined by said duration of a first mount meeting said preset threshold of time~~.

13. (Currently amended) The electronic estrus detection device as defined in claim 1 further comprising: claimed in claim 6 wherein said confirmed estrus is determined by said duration of said mounts meeting said preset threshold of time and said preset number of said mounts occurring within a predetermined period of time.

an indicating means for indicating suspect estrus, confirmed estrus and optimum time to breed.

14. (Previously presented) The estrus detection device as defined in claim 2 wherein said optimum breeding time is a predetermined range of time from the first of said preset number of said mounts meeting said preset threshold and occurring within said predetermined period of time.

15. (Previously presented) The estrus detection device as defined in claim 13 wherein said indicating means is located on the rear of said housing.

16. (Previously presented) The estrus detection device as defined in claim 13 wherein said indicating means comprises at least one LED.

17. (Previously presented) The estrus detection device as defined in claim 13 wherein said indicating means is 3 LED's, each of said 3 LED's indicating either suspect estrus, confirmed estrus or optimum time to breed.

18. (Previously presented) The estrus detection device as defined in claim 2 wherein said preset threshold of time is about 3 seconds.

19. (Previously presented) The estrus detection device as defined in claim 2 wherein said preset number of mounts is 3 mounts and said predetermined period of time is about 4 hours.

20. (Canceled) A self-contained electronic estrus detection device comprising:

a housing for releasable placement on an animal; and

an electronic means operatively associated with said housing for detecting and processing information relating to the number, duration, and frequency of mounts on said animal, said information forming the basis for determining if the duration of said mounts meet a preset threshold of time and if a preset number of said mounts occur within a predetermined period of time, said electronic means calculating and indicating suspect estrus, confirmed estrus and optimum time to breed if said duration of said mounts meet said preset threshold of time and if said preset number of said mounts occur within said predetermined period of time.

21. (Canceled) A self-contained electronic estrus detection device comprising:

a housing for releasable placement on an animal;

electronic means operatively associated with said housing for detecting and processing information relating to the number, duration and frequency of mounts on said animal; and

indicating means for indicating the beginning and end of optimum time to breed based on said information.